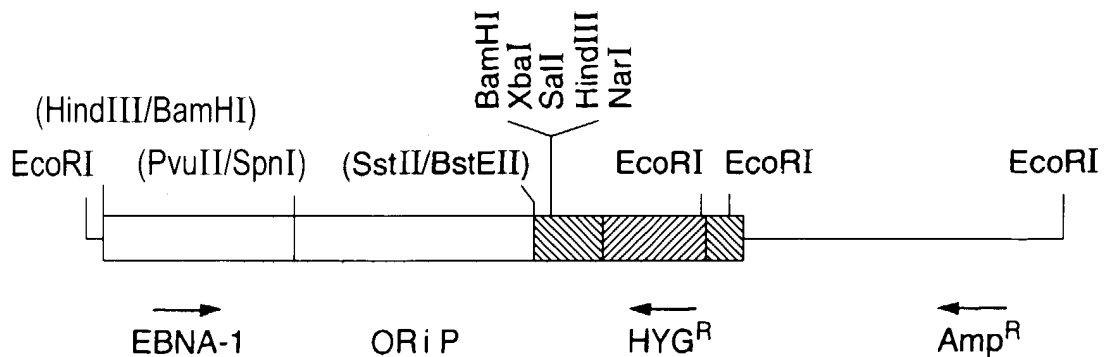


FIG. 1



bp		
1-35	—	pBR322
36-2646	□	EBV EBNA-1 107567-110176 (Baer et. al., Nature 310:1984) Bam HI-PvuII fragment. Bam HI site was blunt-end ligated to the HindIII site.
2647-4826	□	EBV OriP 7333-9516 SphI-SstII sites blunt-end ligated to the BstEII site. (Sugden et. al., MCB 5:410, 1985)
4827-5460	▨	HSV TK regulatory region (McKnight, S.L., Nucleic Acids Res. 8, 5949, 1980)
6488-6747	▨	PvuII fragment ligated into the poisonless pBR322 at NaeI site. These sites lost in cloning.
5461-6487	▨	HPH gene (Gritz and Davies, Gene 25:179, 1983) Ban HI fragment blunt-end ligated into the SmaI and BglII sites in HSV TK sequences.
6748-8952	—	pBR322 poisonless vector (deletion of 1.1 kb in pBR322) confers ampicillin resistance. (Lusky & Botchan , Nature 293:79, 1981)

FIG. 2

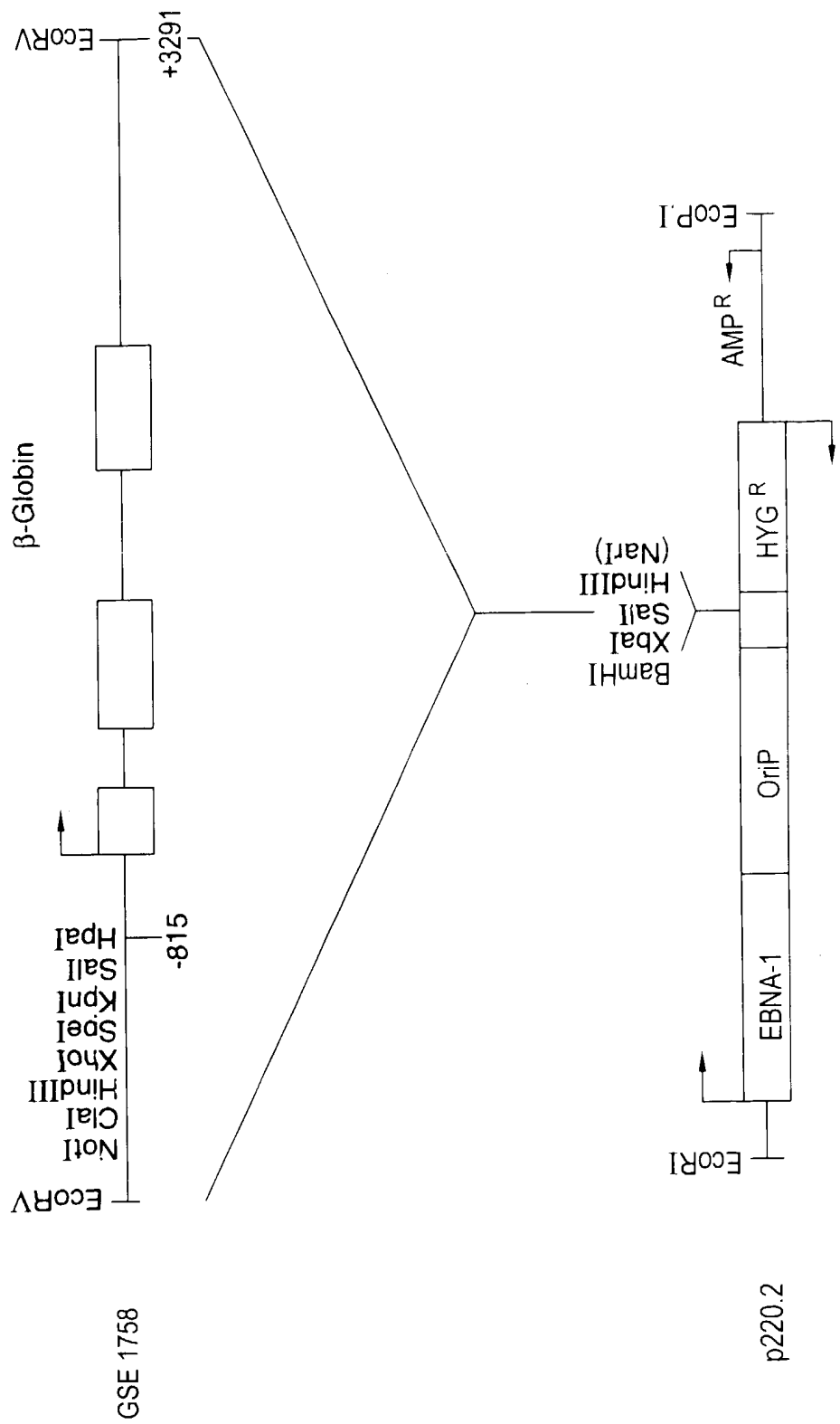


FIG. 3

5' HS-2 - 1.5kb KpnI-BglII
blunted fragment

(KpnI) (XbaI) (BglII)



5' HS-3 - 1.9kb HindIII
fragment

(HindIII) (BamHI) (HindIII)



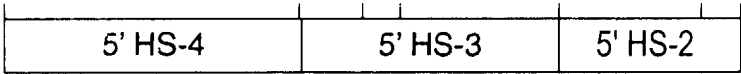
5' HS-4 - 2.1kb BamHI-XbaI
fragment

(BamHI) (XbaI)



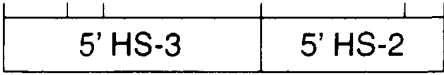
5' HS-4-3-2
5.5kb construct

(BamHI) (XbaI) (BamHI) (BstEII) (XbaI) (BglII)



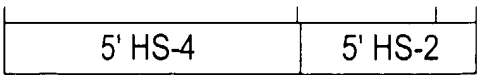
5' HS-3-2
3.4kb construct

(HindIII) (BamHI) (BstEII) (XbaI) (BglII)



5' HS-4-3
4kb construct

(BamHI) (XbaI) (XbaI) (BglII)



5' HS-4-2
3.6kb construct

(BamHI) (XbaI) (XbaI) (BglII)

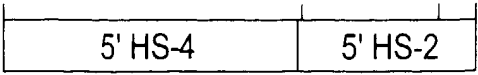


FIG. 4

S1 analysis of K562 cells containing human β -globin on an EBV based vector

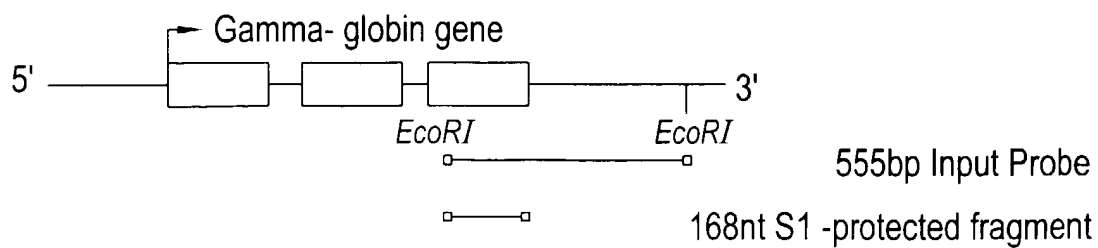
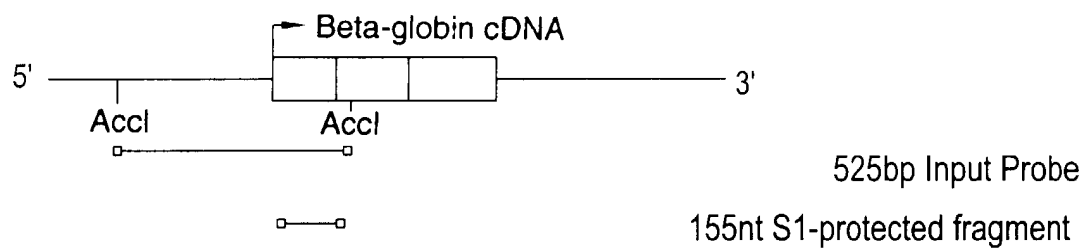
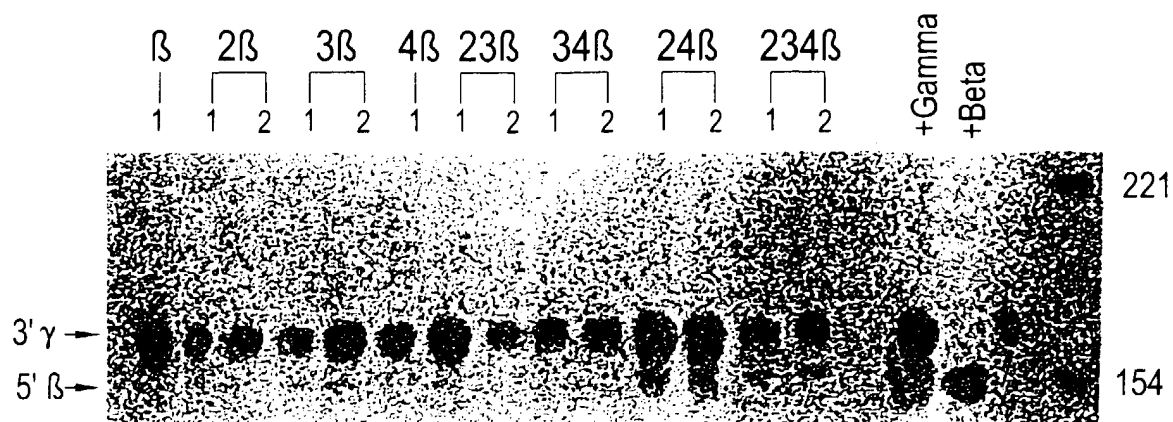


FIG. 5

A.K562



B. HeLa

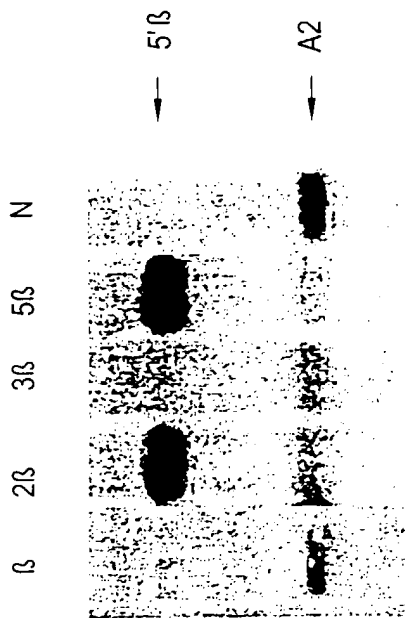


FIG. 6

